IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (canceled)

Claim 2 (cancelled)

Claim 3 (currently amended): ~~The system of claim 1, further comprising~~ A system for analyzing noise comprising:

an error information storage unit storing threshold values of malfunction factors that create a malfunction of a victim receiver cell due to a noise;

an error criterion generation section configured to select the threshold values from the error information storage unit, and to generate an error criterion according to the victim receiver cell by plotting the threshold values and subjecting the threshold values to smooth processing;

a noise analysis section configured to measure the malfunction factors;

a comparison section configured to compare the measured malfunction factors to the error criterion, and to judge whether the noise will create a malfunction of the victim receiver cell when the malfunction factors meet the error criterion; and

a net analysis section configured to distinguish a net through which a clock signal is propagated from another net through which a general signal other than the clock signal is propagated and to order the error criterion generation section to eliminate the error criterion relating to the malfunction factors generated in ~~the~~ rising and falling signals propagated through the net through which the general signal is propagated.

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Claim 4 (currently amended): ~~The system of claim 2, further comprising~~ A system for analyzing noise comprising:

an error information storage unit storing threshold values of malfunction factors that create a malfunction of a victim receiver cell due to a noise;

an error criterion generation section configured to select the threshold values from the error information storage unit, and to generate an error criterion according to the victim receiver cell by plotting the threshold values and subjecting the threshold values to smooth processing;

a noise analysis section configured to measure the malfunction factors;

a comparison section configured to compare the measured malfunction factors to the error criterion, and to judge whether the noise will create a malfunction of the victim receiver cell when the malfunction factors meet the error criterion; and

a net analysis section configured to distinguish a net through which a clock signal is propagated from another net through which a general signal other than the clock signal is propagated and to order the error criterion generation section to eliminate the error criterion relating to the malfunction factors generated in ~~the~~ rising and falling signals propagated through the net through which the general signal is propagated,

wherein the error information storage unit stores at least one of a noise voltage in the rising signal transmitted to the victim receiver cell, a noise duration in the rising signal transmitted to the victim receiver cell, a noise voltage in the falling signal transmitted to the victim receiver cell, a noise duration in the falling signal transmitted to the victim receiver cell, and the victim receiver cell load capacity as the threshold values.

Claim 5 (currently amended): The system of claim [[1]] 3, further comprising an error criterion analysis section configured to analyze a plurality of ~~the~~ error criteria ~~ordering,~~ and to order to eliminate an ~~included~~ error criterion from among ~~when any one of~~ a plurality of error criteria, [[is]] which is included in another error criterion from among the plurality of error criteria.

Claim 6 (currently amended): The system of claim [[2]] 4, further comprising an error criterion analysis section configured to analyze a plurality of ~~the~~ error criteria ~~ordering,~~ and to order to eliminate an ~~included~~ error criterion from among ~~when any one of~~ a plurality of error criteria, [[is]] which is included in another error criterion from among the plurality of error criteria.

Claim 7 (currently amended): The system of claim [[1]] 3, further comprising a logic connection information analysis section configured to select a signal which causes the victim receiver cell to operate from among the falling and rising signals and to order the error criterion generation section to eliminate the error criterion relating to the malfunction factors created in ~~the~~ another signal that is different from the ~~selected~~ signal selected from among the falling and rising signals.

Claim 8 (currently amended): The system of claim [[2]] 4, further comprising a logic connection information analysis section configured to select a signal which causes the victim receiver cell to operate from among the falling and rising signals and to order the error criterion generation section to eliminate the error criterion relating to the malfunction factors

created in ~~the~~ <u>another</u> signal that is different from the ~~selected~~ signal <u>selected from among the falling and rising signals</u>.

Claim 9 (currently amended): The system of claim [[1]] <u>3</u>, further comprising:

a logic connection information input unit configured to transmit data to be designed for a layout pattern of a logic circuit; and

a simulation executing section configured to simulate waveforms of the noise and the <u>clock</u> signal in the logic circuit.

Claim 10 (currently amended): The system of claim [2]<u>4</u>, further comprising:

a logic connection information input unit configured to transmit data to be designed for a layout pattern of a logic circuit; and

a simulation executing section configured to simulate waveforms of the noise and the <u>clock</u> signal in the logic circuit.

Claim 11 (cancelled)

Claim 12 (currently amended): The system of claim 5, further comprising:

a logic connection information input unit configured to transmit data to be designed for a layout pattern of a logic circuit; and

a simulation executing section configured to simulate waveforms of the noise and the <u>clock</u> signal in the logic circuit.

Claim 13 (currently amended): The system of claim 7, further comprising:

a logic connection information input unit configured to transmit data to be designed for a layout pattern of a logic circuit; and

a simulation executing section configured to simulate waveforms of the noise and the clock signal in the logic circuit.

Claim 14 (cancelled)

Claim 15 (currently amended): ~~The method of claim 14, further comprising:~~ A computer implemented method for analyzing noise comprising:

generating an error criterion according to a victim receiver cell, by plotting threshold values of malfunction factors that create a malfunction of the victim receiver cell due to a noise and subjecting the threshold values to smooth processing;

measuring the malfunction factors;

comparing the measured malfunction factors to the error criterion;

judging whether the noise creates a malfunction of the victim receiver cell when the malfunction factors meet the error criterion;

distinguishing a net through which a clock signal is propagated from another net through which a general signal other than the clock signal is propagated; and

eliminating the error criterion relating to the malfunction factors created in [the] rising and falling signals propagated through the net through which the general signal is propagated.

Claim 16 (currently amended): The method of claim [[14]] 15, further comprising ordering elimination of ~~the included~~ an error criterion from among ~~when any one of~~ a

plurality of error criteria, [[is]] which is included in another error criterion from among the plurality of error criteria.

Claim 17 (currently amended): The method of claim [[14]] 15, further comprising:

selecting a signal that causes the victim receiver cell to operate from among the falling and rising signals; and

eliminating the error criterion relating to the malfunction factors generated in the another signal that is different from the selected signal from among the falling and rising signals.

Claim 18 (currently amended): The method of claim [[14]] 15, further comprising:

transmitting data of a layout pattern of a logic circuit to be designed; and

simulating waveforms of the noise and the clock signal in the logic circuit.

Claim 19 (currently amended): The method of claim [[15]] 16, further comprising:

transmitting data of a layout pattern of a logic circuit to be designed; and

simulating waveforms of the noise and the clock signal in the logic circuit.

Claim 20 (currently amended): The method of claim [[16]] 17, further comprising:

transmitting data of a layout pattern of a logic circuit to be designed; and

simulating waveforms of the noise and the clock signal in the logic circuit.